

(12) United States Patent

Wegener et al.

(54) EXHAUST MANIFOLD

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(57)ABSTRACT

An exhaust manifold for installation onto a cylinder head of an internal combustion engine includes a housing having plural inlet openings and an outlet opening. The housing includes an inner shell and an outer shell in surrounding relationship to the inner shell to define a gap there between. The inner shell is floatingly arranged in the outer shell and rests at a side of the cylinder head upon a guide plate which is formed with the plural inlet openings and includes guide members respectively arranged about a circumference of the inlet openings. The outer shell has a cylinder-head-proximal marginal region formed with an outwardly bent flange that rests upon the guide plate and is joined in gastight manner to the guide plate by a material joint. The flange has an outer side in opposition to the guide plate, with a collar being arranged on the outer side of the flange.

12 Claims, 2 Drawing Sheets

